2015 MCVET Winter Wheat and Fall Rye Data Available!

Since 2008, MCVET (Manitoba Crop Variety Evaluation Team) has been publishing winter cereal data collected from their trials shortly after harvest to help farmers and seed growers in Manitoba make variety decisions. In 2015, data is being released for five locations – Boissevain, Carman, Melita, Roblin and Winnipeg – for winter wheat and fall rye.

Here are a few tips to keep in mind when looking through the data.

2015 Multi-Site Yield Data. In the Winter Wheat Yield Comparisons table and the Fall Rye Yield Comparisons table, yield data from 5 locations is presented. Using this table, farmers can make head to head comparisons between varieties at each site, using the statistical information provided in the grey shaded area located at the bottom of the table.

While data from single sites is often more interesting, individual site data and even data accumulated over several sites in a single year, must always be viewed with caution. For example, the new winter wheat variety AAC Elevate was tested for the first time by MCVET in 2014/15, as were the new hybrid fall rye varieties of Brasetto and Guttino, so additional caution must be exercised when evaluating the performance of these varieties.

Ideally, farmers should look at yield data collected over many years and locations (long term yield data) in combination with the multi-site yearly data and select those varieties that perform well not only in their area but across locations and years. Farmers are encouraged to look at past SEED MANITOBA guides, available online at www.seedmb.ca, to see how consistent variety performance is between sites and locations. And although 2015 data has not been incorporated yet, farmers can also visit www.seedinteractive.ca where they can select multiple varieties, locations and years that best compare with their farm, while still offering the ability to choose their own check variety.

But it's not just about yield. Although yield is generally the first information farmers look at, variety characteristics such as maturity, height, standability (resistance to lodging) and disease resistance are critical to maximizing yield potential, end quality and therefore economic returns. Consider 2015 where stripe rust appeared early in the season in winter wheat. Or 2014 where fusarium head blight impacted yield and quality of the winter wheat crop. Selecting a variety with a strong disease package is key to protecting yield and quality.

Agronomic and disease resistance information for the winter wheat and fall rye varieties tested by MCVET in 2014/15 is provided in the Variety Descriptions tables. For winter wheat, please note that long term yield (as well as protein data and site years), does not include the 2015 data (shaded blue area in the table). MCVET is waiting for the remaining sites so data can be incorporated into the mixed model analysis used to generate the long term yield data. For fall rye, long term yield data is not presented as MCVET is updating the fall rye database to conduct mixed

model analysis. Long term yield data for both crop types will be available in SEED MANITOBA 2016 in December. *Note: For information on varieties not tested by MCVET in 2014/15, please refer to the most recent edition of SEED MANITOBA.*

What is not shown in the variety description tables is the winter wheat variety AAC Elevate has resistance to the wheat curl mite, the vector for wheat streak mosaic virus. As well, the hybrid fall rye varieties Brasetto and Guttino have high falling numbers compared to varieties like Hazlet or Prima.

Quality testing is currently underway. MCVET not only collects yield data, but quality information from composite samples obtained after harvest. Protein content analysis will be done by our contractor BioVision Seed Labs. As well, with funding from Winter Cereals Manitoba Inc., fusarium damaged kernels (FDK) and deoxynivalenol (DON) will be determined from harvested samples. Look for that additional quality data in SEED MANITOBA 2016.

Final Thoughts. Regardless of crop type, farmers should continually evaluate the performance of old and new varieties, using available data and speaking with extension professionals and of course their local seed growers. It is the seed growers who see varieties first hand as they grow the pedigreed seed! So after farmer's have made their variety selections, consider planting certified seed to take full advantage of the variety's full genetic potential.

The suite of SEED MANITOBA products - the SEED MANITOBA guide and the websites www.seedinteractive.ca and www.seedmb.ca - will continue to provide the latest unbiased information on post-registration variety performance in Manitoba. All SEED MANITOBA products are a collaborative effort between the Manitoba Seed Growers' Association, Manitoba Agriculture, Food and Rural Development and the Manitoba Co-operator.

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2015 WINTER WHEAT VARIETY DESCRIPTONS TABLE

Class/Variety	DOES NOT INCLUDE 2015 DATA: Site Years Tested	Yield bu/acre	Protein %	Height +/- 26 inches	Relative[1] Maturity	Resistance Level: Lodging	Common Bunt	Stem Rust	Leaf Rust	Stripe Rust	Fusarium[2] Head Blight	Relative[3] Winter Hardiness	Distributor
Canada Western Red Winter													
AAC Elevate~	-	-	-	2	M	VG	MR	MR	I	I	I	G	SeCan
AAC Gateway~	10	79	11.9	1	M	VG	S	MR	I	MR	I	F	Seed Depot
CDC Buteo	96	78	11.2	4	M	G	S	I	I	S	MR	VG	SeCan
CDC Chase	5	81	11.4	7	M	G	S	R	R	MR	MS	F	CANTERRA SEEDS
Emerson~	10	80	12.1	4	M	VG	S	R	I	MR	R	G	CANTERRA SEEDS
Flourish~	26	80	11.4	2	E	VG	MR	I	I	I	S	F	SeCan
Moats~	28	81	11.5	6	E	G	MS	R	R	MR	S	G	SeCan
Canada Western General Purpose													
CDC Falcon	100	77	11.3	0	E	VG	S	MR	MR	S	S	F	SeCan
Varieties that have been supported for registration													
Canada Western General Purpose													
1303-132-2	10	85	10.7	6	M	G	S	R	R	-	MS	F	-
GRAND MEAN (bu/acre)		80	11.1										
LSD (bu/acre) (0.05)		4	0.5										

[1] Maturity ratings: E = Early, M = Medium and L = Late. CDC Falcon is considered an Early (E) maturing variety. Varieties plus 2 to 4 days compared to CDC Falcon would be Medium (M) maturing. Varieties greater than 4 days compared to CDC Falcon would be rated as Late (L) maturing.

[2] Winter wheat varieties generally have poor genetic resistance to fusarium head blight. Earlier flowering of winter wheat relative to spring wheat may allow winter wheat to escape infection. The ratings provided are based on data from the Co-operative Registration Trials and/or performance in commercial fields.

[3] All registered varieties have similar (good) winter hardiness if seeded at the optimum date into standing stubble where good snow cover can be assured. For the newer varieties, there is limited information currently available. As these varieties are grown on more acres, a better understanding of relative winter hardiness will follow.

~ Indicates a variety that is protected by Plant Breeder's Rights or a variety where protection has been applied for but not yet granted at time of printing.

Note: For variety description information on varieties not tested by MCVET in 2014/15, please refer to the most recent edition of SEED MANITOBA.

2015 WINTER WHEAT YIELD COMPARISONS TABLE

Class/Variety	2015 Yield (bu/acre)				
	Boissevain	Carman	Melita	Roblin	Winnipeg
Canada Western Red Winter					
AAC Elevate~	59	91	95	66	92
AAC Gateway~	63	90	96	65	79
CDC Buteo	54	93	96	58	90
CDC Chase	70	99	118	66	84
Emerson~	64	94	100	57	88
Flourish~	63	92	104	74	83
Moats~	61	101	119	64	87
Canada Western General Purpose					
CDC Falcon	56	82	92	69	84
Varieties that have been supported for registration					
Canada Western General Purpose					
1303-132-2	80	110	122	62	103
SITE GRAND MEAN (bu/acre)	63	95	105	64	88
CV%	5.6	3.8	5.0	7.4	9.9
LSD (bu/acre)	6	5	9	8	13
Sign Diff	Yes	Yes	Yes	Yes	Yes

~ Indicates a variety that is protected by Plant Breeder's Rights or a variety where protection has been applied for but not yet granted at time of printing.

Note: Yield data from the 2014/15 MCVET Winter Wheat Trials

2015 FALL RYE VARIETY DESCRIPTIONS TABLE

Variety	Height +/- 43 inches	Relative[1] Maturity	Resistance Level: Lodging	Resistance Level: Ergot	Relative Winter Hardiness	Distributor
Danko	-	-	-	-	F	FP Genetics
Hazlet	0	0	VG	MS	VG	SeCan
Prima	4	-3	F	MS	VG	SeCan
Hybrid Fall Rye						
Brasetto	-4	0	G	MS	VG	FP Genetics
Guttino	-5	0	G	MS	VG	SeedNet

[1] Maturity ratings: Hazlet reaches maturity in approximately 222 days.

2015 FALL RYE YIELD COMPARISONS TABLE

Variety / Type	2015 Yield (bu/acre) Boissevain	Carman	Melita	Roblin	Winnipeg
Danko	-	87	124	50	67
Hazlet	60	101	118	70	81
Hybrid Fall Rye					
Brasetto	77	131	137	91	97
Guttino	75	124	128	93	99
SITE GRAND MEAN (bu/acre)	71	111	127	76	86
CV%	10.1	8.8	6.1	4.6	7.3
LSD (bu/acre)	-	16	-	7	11
Sign Diff	No	Yes	No	Yes	Yes

Note: Yield data from the 2014/15 MCVET Fall Rye Trials